CLAIMS

1. Conveyor line (1) for products (16) such as bottles, cans or similar containers with at least one guide railing (6) which is adjustable across the direction of conveyance and is operable by at least one actuator drive (2), characterized in that stops (8a, 8b, 8c) which can optionally be placed in the adjustment pathway(s) and delimit it can be arranged at several preset positions (7, 7', 7") to define various railing positions.

2. Conveyor line according to Claim 1, characterized in that at least two stops (8a, 8b) are provided.

3. Conveyor line according to Claim 1 or 2, characterized in that the stops (8a, 8b, 8c) can be moved into the preset positions (7, 7', 7") either manually and/or by control means.

4. Conveyor line according to Claims 1 through 3, characterized in that the stops (8a, 8b, 8c) which are in preset positions (7, 7', 7") can be moved into the adjustment pathway(s) either manually and/or by control means.

5. Conveyor line according to Claims 1 through 4, characterized in that at least one opposing stop (11) which can be brought into contact (8) with the stops (8a, 8b, 8c) and follows the adjusting movement is arranged on the guide railing (6) or the actuator drive (2).

6. Conveyor line according to Claim 5, characterized in that the opposing stop (11) has at least two stop faces (11a, 11b) facing away from one another – based on the adjustment path(s).

7. Conveyor line according to one of Claims 1 through 6, characterized in that the actuator drive (2) is a linear drive, in particular a preferably double-acting pneumatic cylinder having a cylinder element (Z) which has a cylinder body (9) and a piston rod (10) and the preset positions (7, 7', 7") are assigned to the linear drive, preferably as a stop mount (A) attached to the cylinder element (Z) of the pneumatic cylinder in the axial direction.

8. Conveyor line according to one of Claims 1 through 7, characterized in

that the preset positions (7, 7', 7") are designed in the form of recesses, in particular bores into which the stops (8a, 8b, 8c) can be inserted in a form-fitting manner.

9. Conveyor line according to Claims 1 through 8, characterized in that the preset positions (7, 7', 7") are designed in the form of multiple bores in the stop mount (A) set along the adjustment path(s) in the axial direction, preferably in at least two rows with an arrangement of bores offset in the axial direction of the stop mount (A).

10. Conveyor line according to at least one of Claims 1 through 9, characterized in that the stops (8a, 8b) are designed as form-fitting plug or screw elements, preferably pins.

11. Conveyor line according to one of Claims 4 through 10, characterized in that the stops (8a, 8b, 8c) are designed as pneumatic cylinders that can be operated by control means.

12. Conveyor line according to one of Claims 7 through 11, characterized in that the stops (8a, 8b, 8c) can be screwed into threaded bores (7, 7', 7") in the stop mount (A).

13. Conveyor line according to one of Claims 7 through 12, characterized in that the stop mount (A) has an axial bore (13) aligned with the cylinder body (9).

14. Conveyor line according to Claim 13, characterized in the bore (13) is arranged coaxially with the piston rod (10) and the latter passes at least partially through it.

15. Conveyor line according to Claims 13 and 14, characterized in that the inside diameter (D) of the bore (13) is greater than the outside diameter (d) of the piston rod (10), thus forming an annular space (14).

16. Conveyor line according to Claims 8 through 15, characterized in that the bores (7, 7', 7") for accommodating the stops (8a, 8b, 8c) are assigned to the annular space (14) so that the stops (8a, 8b, 8c) pass through the annular space (14) approximately at a right angle to its longitudinal extent when in the engaged or working position.

17. Conveyor line according to Claim 13 through 16, characterized in that the stop mount (A) has a centering shoulder (12) which engages in the cylinder body (9) in a form-fitting manner.

18. Conveyor line according to at least one of Claims 5 through 17, characterized in that the opposing stop (11) is attached to the piston rod (10) and is guided in the interior of the stop mount (A).

19. Conveyor line according to Claims 13 through 18, characterized in that the opposing stop (11) is displaceable with the piston rod (10) over the entire length of the adjustment path(s) in the stop mount (A).

20. Conveyor line according to Claims 1 through 19, characterized in that the adjustable guide railings (6) are arranged so they run opposite one another in pairs and parallel to the direction of conveyor with a distance between them.

21. Conveyor line according to Claims 1 through 20, characterized in that the products (16) to be transported, in particular bottles, have a collar (17) by means of which they are transported suspended on two parallel mounting rails (15) which run with a distance between them.

22. Conveyor line according to Claim 21, characterized in that the carrying strips (15) are mounted in such a way that the products (16) are conveyed as suspended items beneath an air guide box (3).

23. Conveyor line according to Claim 21 or 22, characterized in that a nozzle channel (4) running in the direction of conveyance has blow nozzles aimed at the products (16) in the direction of conveyance.

24. Conveyor line according to Claims 1 through 20, characterized in that the products (16) to be conveyed, in particular containers, are conveyed standing upright on a conveyor belt.

25. Actuator drive, in particular for actuating and positioning adjustable guide railings on conveyor lines for products such as bottles, cans or similar containers, characterized in that multiple stops (8a, 8b, 8c) which

can be arranged at preset positions (7, 7', 7") and can be moved into the adjustment path(s) of the actuator drive (2) and delineate the path are provided for defining various positions.

26. Actuator drive according to Claim 25, characterized in that at least two stops (8a, 8b) are provided.

27. Actuator drive according to Claims 25 or 26, characterized in that the stops (8a, 8b, 8c) can be moved into the preset positions (7, 7', 7") by manual operation or by controlled operation.

28. Actuator drive according to at least one of Claims 25 through 27, characterized in that the stops (8a, 8b, 8c) can be moved into the adjustment path(s) either by manual operation and/or by controlled actuation.

29. Actuator drive according to at least one of Claims 25 through 28, characterized in that at least one opposing stop (11) which can be brought into contact (8) with the stops (8a, 8b, 8c) and which follows the adjusting movement is arranged in the path of adjustment(s).

30. Actuator drive according to Claim 29, characterized in that the opposing stop (11) has at least two stop faces (11a, 11b) facing away from one another, based on the path of adjustment(s).

31. Actuator drive according to at least one of Claims 25 through 30, characterized in that the actuator drive is a linear drive, in particular a preferably double-acting pneumatic cylinder having a cylinder element (Z) which has a cylinder body (9) and a piston rod (10), and the preset positions (7, 7', 7") are assigned to the pneumatic cylinder, preferably as a stop mount (A) which is attached to the cylinder element (9) in the axial direction.

32. Actuator drive according to at least one of Claims 25 through 31, characterized in that the preset positions (7, 7', 7") are designed in the form of recesses, in particular bores, into which the stops (8a, 8b, 8c) can be inserted in a form-fitting manner.

33. Actuator drive according to at least one of Claims 31 or 32, characterized in that the preset positions (7, 7', 7") are designed in the form of multiple bores in the stop mount (A) offset in the axial direction, preferably in at least two rows with an arrangement of bores that are offset in relation to one another in the axial direction of the stop mount (A).

34. Actuator drive according to at least one of Claims 25 through 33, characterized in that the stops (8a, 8b, 8c) are designed as form-fitting screw or plug elements, preferably pins.

35. Actuator drive according to one of Claims 28 through 34, characterized in that the stops (8c) are designed as pneumatic cylinders that can be operated by control means.

36. Actuator drive according to one of Claims 31 through 35, characterized in that the stops (8a, 8b, 8c) can be screwed into threaded bores (7, 7', 7") in the stop mount (A).

37. Actuator drive according to one of Claims 31 to 36, characterized in that the stop mount (A) has an axial bore (13) aligned with the cylinder head (9).

38. Actuator drive according to Claim 37, characterized in that the bore (13) is arranged coaxially with the piston rod (10) with the latter passing through it at least partially.

39. Actuator drive according to Claim 39 and 38, characterized in that the inside diameter (D) of the bore (13) is greater than the outside diameter (d) of the piston rod (10) and an annular space (14) is formed between them.

40. Actuator drive according to Claim 39, characterized in that the bores (7, 7', 7") are assigned to the annular space (14) to accommodate the stops (8a, 8b, 8c) such that the stops (8a, 8b, 8c) pass through the annular space (14) approximately perpendicularly to its longitudinal extent when in an engaged position or working position.

41. Actuator drive according to Claims 31 through 40, characterized in that the stop mount (A) has a centering shoulder (12) which engages in the cylinder head (9) in a form-fitting manner.

42. Actuator drive according to at least one of Claims 31 through 41, characterized in that the opposing stop (11) is attached to the piston rod (10) and is guided in the interior of the stop mount (A).

43. Actuator drive according to at least one of Claims 31 through 42, characterized in that the piston rod (10) is displaceable with the opposing stop (11) over the entire length of the stop mount (A).

44. Conveyor line according to at least one of Claims 1 through 24, characterized in that the guide railing (6) is operable so that it is adjustable in height by at least one actuator drive (2') longitudinally to the vertical axis of the items being conveyed, with stops (8a, 8b, 8c) which may optionally be arranged in the adjustment path (V) at multiple preset positions (7, 7', 7") and delineate said path on the vertical adjustment path (V) of the guide railing (6) or the at least one actuator drive (2') and thereby define various railing positions.